Medium-Term Capital Investment Survey

1968

by
B. A. Keys
D. S. Rothwell
F. G. Thompson

Economic Council
of Canada

ON HER MAJESTY'S SERVICE
SERVICE DE SA MAJESTE

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MEDIUM-TERM

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This paper was prepared by members of the staff of the Economic Council of Canada. The views and conclusions contained in it are those of the authors themselves.

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We are grateful to the many executives and officials who entrusted to us their forward plans and made this survey possible.

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FOREWORD

Improved medium-term planning in both the private and public sectors of the economy has been urged by the Economic Council of Canada since its inception in 1963. A sustained high level of economic performance in Canada is unlikely to be attainable if the bulk of decisions, actions and attitudes in government and business is dominated by short-run issues and considerations. There is an obvious need for more intensive and more informed assessment of medium- and longer-term trends and conditions as a basis for improved decision-making.

Under its legislative terms of reference the Economic Council is directed, among its other duties in assessing the medium-term future of the Canadian economy, to consult businessmen about their capital investment plans. Such interviews not only supply the basic information for the survey results contained in this Study, but also provide the opportunity for a useful exchange of information and ideas between the Council and the business community.

The medium-term capital investment intentions reported in this paper are relevant to good forward planning, and have become the object of an annual survey by the Economic Council. At the data-collection stage, this survey is now carried out in conjunction with the annual Preliminary Survey of Capital Investment Intentions of the Department of Trade and Commerce. This co-operation with the Department has permitted broader, faster coverage of the medium-term investment intentions of provincial governments and universities as well as business firms, and has also reduced the demands on the time of those who supply the information.

As explained in the body of this report, a survey of this nature has inherent limitations that prevent its results from being construed as an accurate forecast of actual capital expenditures. But we hope it will make an effective contribution to more informed decision-making and policy formulation in all sectors of the economy.

Arthur J. R. Smith,
Chairman

HIGHLIGHTS

The medium-term capital investment intentions of approximately 200 large business firms, universities and provincial governments were surveyed by the Economic Council of Canada in conjunction with the Department of Trade and Commerce in October 1968. Among the principal results are the following:

-- An over-all increase of 11 per cent in capital investment in construction, machinery and equipment is anticipated over the next two years. The subsequent decline in intentions, especially after 1971, is considered to reflect the difficulty of planning that far ahead, rather than a sign of poor growth prospects in the early 1970's.

-- Universities are planning a continuation of steeply rising expenditures on new facilities. By 1970 it is expected that their construction programs will be almost double those of 1967. Projections by provincial governments were usually provided only to 1969; the planned capital outlays of such governments are expected to rise only moderately from the 1968 level.

-- Compared with the results of last year's survey, the medium-term investment outlook now appears to be more in line with the economy's potential for growth, estimated by the Economic Council to be an increase in real output averaging more than 5 per cent a year from now to the mid-1970's. This is a very high rate of growth, both in relation to Canada's historical growth performance and in comparison with expected growth rates in other industrially advanced nations. The achievement of such a growth rate will require strong and sustained increases in capital investment.

Increased coverage of business firms this year permits the data to be classified into a number of industry sectors. Results of the survey, including this breakdown, are summarized in index form for the 1967-73 period on the next page. The "Capital Investment Intentions" section of this paper comments in more detail on the results in each sector.

Indexes of Capital Investment Intentions

(1967 = 100)

	1967	1968	1969	1970	1971	1972	1973
Manufacturing (Total)	100.0	75.8	90.4	88.1	79.0	78.4	75.5
Pulp & paper	100.0	54.9	69.2	48.9	53.7	66.5	54.0
Primary metals	100.0	74.3	96.7	81.8	76.7	79.3	82.0
Chemicals	100.0	99.9	94.1	113.4	97.5	70.7	76.4
Other manufacturing	100.0	89.2	105.8	119.6	98.3	92.6	91.8
Mining	100.0	110.7	112.7	103.0	148.1	76.9	78.8
Oil & Gas Companies(1)	100.0	131.5	140.3	151.8	151.3	134.5	115.9
Oil & Gas Transmission(2)	100.0	118.8	112.0	109.8	101.7	92.6	104.5
Power Utilities	100.0	106.3	117.5	113.0	112.3	96.7	91.1
Transportation & Storage	100.0	110.2	115.9	127.8	117.3	117.5	114.6
Communications	100.0	104.3	109.6	123.3	132.1	136.5	146.5
Trade, Finance & Other Commercial(3)	100.0	124.9	139.1	150.1	122.8	117.4	129.5
Total Business	100.0	103.1	112.2	114.8	112.2	103.4	100.6
Universities	100.0	113.8	142.5	181.5	178.2	158.1	142.0
Provincial Governments	100.0	151.2	158.5	--	--	--	--
Survey Total	100.0	104.2	113.4	117.4	114.7	105.5	102.2

(1) Includes production and refining.

(2) Includes pipelines and distribution.

(3) Includes banks.

Expressing the results of the survey in terms of categories of investment, the following index shows the breakdown between construction and machinery and equipment.

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	103.0	119.5	124.2	111.2	97.0	96.1
Machinery and Equipment	100.0	100.0	105.7	113.5	118.9	114.4	108.9

The survey results should be interpreted with some caution. Our experience to date with medium-term surveys indicates that the results tend to reflect the current intentions of the organizations as expressed in the interviews, rather than an accurate forecast of investment expenditures. Short-term (one- to two-year) intentions such as those surveyed by the Department of Trade and Commerce tend to constitute fairly accurate plans and commitments for the following year. Medium-term (about five-year) indications, on the other hand, are subject to unforeseen developments, and the level of proposed expenditures is influenced quite strongly by the outlook of the particular organizations at the time of the survey. Moreover, because of the uncertainties associated with forward planning of this type, and because planning for certain expenditures does not need a lead time of more than two or three years ahead, the rate of growth of new investment characteristically declines beyond the two- or three-year period required to plan many specific projects. Hence, in the results of the current survey, attention should be focused particularly on the period to 1971.

A medium-term investment survey, however, can be very useful both for private organizations and governments. The results can act as an early warning of trouble ahead, such as could be caused by sudden bulges in construction demand or insufficient additions to productive capacity, and thus provide the time for public authorities and private decision-makers to recognize, and cope in advance with, problems that might make it difficult to maintain stable growth. Since fiscal policies affecting capital investment are known to operate with a considerable lag -- a relatively long period of time between action and effects -- this extra time can be invaluable in striving to avoid bottlenecks, stresses and strains in the market for construction services and for both consumer and capital goods. In addition, such "lead time" can be of considerable value in planning manpower requirements and organizing recruiting and training programs.

The practice of medium-term capital investment planning by business firms is increasing. The Economic Council's first survey of five-year intentions, in 1964, found that only 60 per cent of the companies interviewed had regularly prepared capital expenditure plans of this kind. In 1967 the figure had risen above 70 per cent, and the October 1968 survey revealed that this proportion had risen to 85 per cent.

CAPITAL INVESTMENT INTENTIONS

According to the index of Total Business Intentions, the business firms surveyed (approximately 160, accounting in 1967 for more than 60 per cent of total business capital investment) expect that capital expenditures will grow substantially through to 1971 with an 8.8 per cent increase planned for 1969 compared with 1968.[1] This figure reflects a stepped-up rate of investment in prospect after the relatively low rates of growth in capital investment in 1967 and 1968. The index figures in general represent a considerably higher rate of projected growth in capital investment than was indicated at the time of last year's survey. It will be recalled that in our report last year concern was expressed that the rate of investment would be inadequate to achieve potential output in the economy in the early 1970's.[2] The outlook for capital investment in the current survey is much more in line with the requirements for growth of productive capacity at potential output. Increased optimism among business

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[1] The Business Investment Outlook for 1969, released recently by the Department of Trade and Commerce, reported an anticipated increase of 8.0 per cent over 1968. This small difference is due to an earlier cut-off date by the Department and the inclusion of some additional reports in the 8.8 figure.

[2] B. A. Keys, Medium-term Business Investment Outlook -- 1967 Survey, Staff Study No. 22, Economic Council of Canada, Ottawa, Queen's Printer, 1967, p. 5.

planners this year appears to have been based on more buoyant business conditions and the marked improvement in corporation profits. Beyond 1970, and particularly after 1971, the index figures suggest that the rate of increase in capital investment will decline. As observed above, this decline likely reflects the uncertainties associated with planning that far ahead, rather than the actual levels of capital investment to be anticipated.

During the survey, an attempt was made to probe the reasoning behind business investment decisions, and some of the factors, external to the firm, that could cause alterations to present plans. High interest rates such as those that prevailed during part of 1968 were not generally considered to be serious deterrents to capital investment in most industries. The area of activity most seriously affected is exemplified by the real estate development business, in which interest on capital borrowed for the erection of large office buildings, apartment complexes, or shopping centres forms a large percentage of the total operating costs. Most other businessmen interviewed expressed the feeling that money needed for viable projects will be forthcoming at terms they will find acceptable.

One of the most decisive factors in a firm's investment plans is, understandably, its assessment of the future market demand for its products or services. Businessmen often cited changes in the international or domestic economic environment -- changes that would in some way alter their demand picture -- as a factor that would give rise to changes in their investment outlook.

Changes in the competitive structure of an industry could, in the opinion of many businessmen, give rise to changes in spending plans. For example, some feel that alterations in tariffs and trade barriers could, at least in the short run, upset a domestic firm's share of the market sufficiently to make additional plant capacity unwarranted.

Others recognize export opportunities arising out of reductions in foreign tariffs, and foresee requirements for additional facilities as new markets are developed.

More than half the firms interviewed predicted an upward trend in capital expenditures to 1973. Of these, a large majority will be spending the money to increase productive capacity in order to meet expected increases in the demand for their products. Most of them also intend to make substantial outlays on equipment to keep pace with advancing technology.

On the basis of the survey data, two major industries plan a reduction in capital spending over the term under review. The most marked reduction is in pulp and paper, which is emerging from an extended period of major expansion and is currently operating well below capacity. In the chemical industry, market growth and demand are considered quite favourable but, at the time of the survey, considerable concern was felt over tariff changes. The index of anticipated investment in the primary metals industry appears weak in relation to 1967 but relatively strong compared with 1968. Indications of greatest strength appear in oil and gas, transportation and storage, communications, trade and finance, and among the universities.

The data indicate that all industries except pulp and paper contribute to the strength in construction investment through 1970. Towards the end of the period, weakness in this category appears throughout the manufacturing group of companies and also in mining and in power utilities. In machinery and equipment, the only sectors showing less strength than average are mining, oil and gas transmission, and, to a lesser extent, manufacturing.

An examination of individual industry indexes on the following pages will provide further detail concerning the distribution of planned capital expenditures. Since 1967 was the latest year for which complete data were available, it was chosen as the base for most of the indexes presented

throughout this report. It will be noted, however, that some of the industries, such as pulp and paper, which project a decline in capital investment during the five-year period ahead, in relation to 1967, show considerable strength when compared with 1968 outlays. This results, of course, from a relatively low level of capital investment indicated for 1968 relative to 1967, and is found also in the primary metals industry and in the group included under the heading "other manufacturing".

Because of this unevenness in the pattern of capital investment intentions, we believe that it is appropriate to examine also an index based upon 1968. Where the picture portrayed by one index is at some variance with the other, having both available enables readers to assess future prospects in terms of current performance as well as against the latest complete year. Accordingly, when appropriate to the discussion of individual industry groups, separate indexes will be shown for base years 1967 and 1968.

In a few instances, the index of total investment appears inconsistent with the indexes of construction and machinery and equipment. This is due to the influence in the total index of companies that were not able to provide a breakdown of over-all expenditures between construction and machinery and equipment.

For convenience, statistical details, together with an outline of the scope and procedures of the survey, appear in the Appendix.

Manufacturing

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	64.4	96.1	101.6	73.5	69.7	56.1
Machinery and Equipment	100.0	76.0	90.3	96.3	87.0	88.0	88.3
Total	100.0	75.8	90.4	88.1	79.0	78.4	75.5
1968 = 100							
Construction		100.0	146.6	155.0	112.1	106.3	85.6
Machinery and Equipment		100.0	118.3	126.1	113.9	115.3	115.9
Total		100.0	119.2	116.2	104.2	103.5	99.7

Number of firms reporting: 70.

It will be noted from the above indexes that this category, comprising all the manufacturing companies surveyed, represents an instance where the outlook for capital investment appears markedly different when based upon 1968 rather than 1967. The discussion that follows presents in more detail the outlook in individual manufacturing industries.

Pulp and Paper

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	54.7	59.4	38.7	41.3	52.3	41.1
Machinery and Equipment	100.0	54.9	75.9	54.7	61.5	76.1	62.2
Total	100.0	54.9	69.2	48.9	53.7	66.5	54.0
1968 = 100							
Construction		100.0	104.0	67.8	72.3	91.6	72.0
Machinery and Equipment		100.0	135.6	97.8	110.0	136.1	111.2
Total		100.0	126.1	89.2	97.9	121.2	98.4

Number of firms reporting: 22.

Pulp and paper is one of the industries in which the appearance of the outlook changes significantly when the base year is shifted from 1967 to 1968.

Even on the later basis, however, the outlook for capital investment in new construction is weak compared with recent performance. Pulp and paper manufacturers are emerging from a period of very heavy investment in productive plant. In this industry, for a variety of reasons, additions to capital in the past have typically taken place in uneven surges, while the market growth follows a smoother upward curve. One of the resultant intermittent periods of substantial excess capacity is currently in evidence, making unattractive, most new projects that would add to capacity. Based on 1968, there is, however, an uptrend in projected expenditures on machinery and equipment, aimed particularly at the modernization of existing facilities.

Primary Metals

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	45.6	121.6	160.5	77.7	73.0	45.0
Machinery and Equipment	100.0	66.5	90.2	109.4	80.6	88.1	105.6
Total	100.0	74.3	96.7	81.8	76.7	79.3	82.0
1968 = 100							
Construction		100.0	264.8	349.5	169.2	159.0	97.9
Machinery and Equipment		100.0	135.6	164.5	121.2	132.5	158.9
Total		100.0	130.2	110.1	103.3	106.8	110.4

Number of firms reporting: 8.

Because of rather drastic reductions in expenditures between 1967 and 1968, the outlook for the primary metals group of companies shifts markedly when the index is compiled on a 1968 rather than a 1967 base. The lower level of expenditures in 1968 appears to have been due largely to projects that were delayed or that were suspended because of anticipated weakness in the markets of some segments of the industry in late 1967 and early 1968. Among other difficulties, companies that depend to a significant degree on foreign markets were concerned about international financial instabilities and their possible effects on international trade. However, very large increases, especially in construction (which includes the development of new mines) are being planned for the next few years. Most of the financing of expenditures is expected to be supplied by internally generated funds but supplemented by some capital from the financial markets.

Chemicals

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100. 0	114. 9	116. 6	156. 8	152. 3	104. 3	94. 5
Machinery and Equipment	100. 0	97. 9	90. 6	106. 9	110. 1	77. 5	87. 3
Total	100. 0	99. 9	94. 1	113. 4	97. 5	70. 7	76. 4

Number of firms reporting: 9.

Several executives in the chemical manufacturing industry expressed concern over recent changes in the tariff structure that, they maintain, militate against a strong Canadian chemical manufacturing industry, despite a growing market for their products. They see these changes as the predominant reason for the rather low growth rate in capital investment anticipated over the next five years. Most expenditures presently allocated are to modernize existing plant and to keep pace with technical improvements in equipment and processes. Expenditures are expected to be financed largely from internally generated funds. The surge of activity shown in the above table for 1970 and 1971 reflects some tentative projects that may or may not go forward, depending upon international competitive conditions.

Other Manufacturing

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	84.1	131.5	141.0	107.3	89.6	84.0
Machinery and Equipment	100.0	90.4	102.5	118.7	102.8	100.2	100.3
Total	100.0	89.2	105.8	119.6	98.3	92.6	91.8
1968 = 100							
Construction		100.0	156.4	167.7	127.6	106.5	99.8
Machinery and Equipment		100.0	113.4	131.3	113.7	110.9	111.0
Total		100.0	118.6	134.0	110.1	103.7	102.8

Number of firms reporting: 31.

"Other manufacturing" includes organizations in the food and beverage, automotive and tire, machinery and construction industries, as well as others, a substantial number of which serve the consumer market. Almost unanimously, these firms project a buoyancy of demand that is expected to require substantial increases in capital spending, especially in comparison with 1968 levels and particularly during the next two to three years. To finance such capital outlays, most companies plan to rely largely on internally generated funds, augmented where necessary by the assumption of debt and, in a few cases, by new equity issues. Only in isolated cases do they express concern over a possible high cost or short supply of capital in the financial markets -- they feel that money needed for viable projects will be forthcoming at terms they will find acceptable. Further, this generally optimistic group sees comparatively few problems on the horizon that could lead to a downward revision of their spending plans. They are not overly concerned about the likelihood of unfavourable economic conditions, although they expressed some uneasiness over foreign competition and its possible effect on their markets.

Mining

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	123.9	128.0	135.9	136.4	62.1	88.6
Machinery and Equipment	100.0	104.9	104.6	78.0	166.3	94.3	73.9
Total	100.0	110.7	112.7	103.0	148.1	76.9	78.8

Number of firms reporting: 14.

The substantial decline in projected capital expenditures towards the end of the period is rather characteristic of this industry, whose fortunes are tied closely to its success in discovering new ore bodies. As a result, plans tend to include only projects that are fairly definite, but the executives interviewed anticipate an upward revision of the figures for later years. Actual capital expenditures for mining firms have shown, during recent years, a steady and substantial rate of growth, which is expected to continue; reports of present overcapacity were rare.

Concern is widespread over the implications of the Carter Commission recommendations that existing tax-free periods be eliminated and depletion regulations be drastically altered. There is general agreement among the industry officials interviewed that plans for a number of marginal development projects would, of necessity, be abandoned if these recommendations were to be implemented.

Excepting the case of the very large companies, debt is not an important segment of the capital structure of most mining operations. Accordingly, capital expenditures are expected to be financed largely from retained earnings, affiliated companies, or new equity issues.

Oil and Gas*

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	126.7	139.2	137.7	130.1	120.3	121.0
Machinery and Equipment	100.0	133.7	136.9	165.0	173.7	148.0	104.8
Total	100.0	131.5	140.3	151.8	151.3	134.5	115.9

* Includes production and refining.

Number of firms reporting: 20.

Like those of the mining industry, capital expenditures in the oil and gas industry are highly sensitive to new discoveries of resources. Nonetheless, companies engaged in this high-risk undertaking often use a variety of quite sophisticated planning techniques in order to determine the most probable pattern of expenditures over the medium term. An exciting discovery could accelerate spending plans overnight, just as a protracted period of uneventful drilling could lead to foreign parent organizations diverting exploration funds to more promising areas in other countries.

Concern, expressed in the report of the 1967 Economic Council of Canada survey,[1/] lingers over the possible effect of the elimination of depletion allowances as proposed by the Carter Commission.

Despite the uncertainty of exploration success and government policy, exploration and production companies, looking forward to generally favourable market conditions, anticipate a steadily increasing expenditure on capital items until 1971. Beyond that date, present plans call for some abatement. Expenditures are expected to be financed primarily by foreign parent companies, with some help

1/ Ibid.

from funds generated internally by the companies themselves. Cost and availability of capital are generally expected to exert only a minor influence, affecting only marginal undertakings. The development of a promising oil or gas discovery is not likely to be influenced by the cost of borrowed funds.

The refining and distribution arm of the petroleum industry foresees the continuing need for increased capacity and efficiency of production to meet the needs of the country's expanding population. Refineries near the more active Eastern Canadian markets are favoured, although new and larger facilities are also expected to be developed in the West.

Oil and Gas Transmission*

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	119.0	122.1	124.1	112.3	105.2	136.1
Machinery and Equipment	100.0	118.3	94.8	85.0	83.4	70.8	61.7
Total	100.0	118.8	112.0	109.8	101.7	92.6	104.5

* Includes pipelines and distribution.

Number of firms reporting: 8.

The outlook in this industry is for strong growth in demand and for increasing investment in the construction of both main carrying lines and distribution systems. Funds are expected to be generated internally and to be raised in the financial markets.

Power Utilities

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	100.8	115.2	107.7	102.6	82.0	77.0
Machinery and Equipment	100.0	106.8	123.4	127.0	138.9	137.4	130.0
Total	100.0	106.3	117.5	113.0	112.3	96.7	91.1

Number of firms reporting: 12.

Responding to anticipated increases in the demand for power from both the industrial and private sectors, the power utilities are planning significant increases in capital expenditure to 1970, after which the rate of increase, as presently envisaged, will diminish somewhat. It will be noted that the anticipated decline is solely in construction, and marks the completion of the construction phases of a number of major new projects. Expenditures on equipment are expected to continue to increase virtually throughout the period, in order to provide the increased capacity required.

Companies in this industry traditionally produce from internal sources less than half the funds necessary to finance their expansion programs -- the rest is usually borrowed on a long-term basis on the financial markets. Due to their heavy dependence on debt-financing, power companies are somewhat more conscious than others of the present high cost of capital, but this factor is unlikely to bring about major deferments in programs for expansion of capacity.

Power utilities are more concerned over the fact that sites for future hydro developments are remote from the load centres, necessitating expensive, long, and technically difficult high-tension transmission lines. Utilities across the country are in various stages of investigating or developing the use of nuclear power stations in the future.

Transportation and Storage

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	100.0	142.8	174.1	145.2	130.4	131.4
Machinery and Equipment	100.0	115.3	102.7	109.7	107.4	114.7	109.7
Total	100.0	110.2	115.9	127.8	117.3	117.5	114.6

Number of firms reporting: 9.

Officials of such organizations as railways and airlines are almost unanimous in their favourable assessment of future demand for the services of their companies. In spite of the fact that 1968 business may be lower than originally predicted in some fields, provision is being made for large increases in passenger and freight-handling capacity over the next five years.

Rapid technological change gives rise to a number of major problems and uncertainties in the field of transportation. Very large and very costly new types of aircraft, necessary to maintain position vis-à-vis competitive airlines, but demanding large passenger loads for economical operation, are very burdensome to the corporate purse. Specialized rolling stock, useful for one or two types of freight, increase the investment in railway freight cars. Long-term leasing of several types of rolling stock allows some railways to liberate their capital for other purposes. As far as possible, the capital value of leased equipment is included in the figures given in this report.

Much of the capital required is supplied through funds generated internally. The other major source is the financial markets.

Communications

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	101.2	119.2	136.7	122.1	139.1	144.5
Machinery and Equipment	100.0	104.8	108.5	122.6	136.5	138.7	149.9
Total	100.0	104.3	109.6	123.3	132.1	136.5	146.5

Number of firms reporting: 10.

The communications industry, represented largely by telephone companies, plans a steadily increasing program of capital expansion, reaching at the end of five years an annual level nearly 50 per cent higher than that of 1967. The need for markedly enlarged information-carrying capacity, together with technological advances requiring expensive equipment replacement, account, in large part, for these projected expenditures.

Like the power utilities, those companies in the communications industry that are privately owned rely largely on debenture financing as a source of funds, although internally generated funds are also a significant source. Again, little concern was expressed over the high interest rates that prevailed in 1968. It was the general opinion that if borrowing costs increased markedly, rate adjustments would be in order, and that the market for communications services is sufficiently elastic to absorb such increases.

Trade, Finance and Other Commercial*

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	129.3	150.5	170.5	128.6	127.1	147.8
Machinery and Equipment	100.0	118.3	121.8	118.8	121.2	109.4	109.7
Total	100.0	124.9	139.1	150.1	122.8	117.4	129.5

* Includes chartered banks.

Number of firms reporting: 20.

This classification includes such consumer-oriented organizations as department stores, retail food chains, real estate firms, and banks. As a group, they expect consumer spending to remain sufficiently buoyant over the coming five years to merit consistently larger outlays on facilities than they made in 1967. The expanding population and growing incomes increase directly or indirectly the demand for facilities such as shopping centres, supermarkets, banks, and apartment buildings.

Many of these facilities are financed by development companies, sometimes subsidiaries of the tenant firms. Interest rates are relatively important to these firms, since the cost of borrowed capital is a major portion of the overall operating cost. Continued high interest rates could, in this case, adversely affect planned construction in areas of keen competition. Local regulations, sometimes restricting the density of occupancy, can, at times, make an otherwise promising project unsound financially. However, in the final analysis, these firms respond to demand from the consumer sector, which they generally feel will continue to be strong over the medium term. The surge in construction anticipated in 1973 reflects a couple of major projects being planned for that time.

Universities

	1967	1968	1969	1970	1971	1972	1973
1967 = 100							
Construction	100.0	124.4	149.5	193.8	173.6	154.7	144.5
Machinery and Equipment	100.0	111.4	123.7	136.4	240.7	209.6	151.1
Total	100.0	113.8	142.5	181.5	178.2	158.1	142.0

Number of institutions reporting: 21.

The record number of children born in the years following the Second World War are now reaching university age, and a growing percentage of them are seeking higher education. To cope with the burgeoning enrolment, universities are planning construction programs that will, by 1970, be almost double that of 1967. The pace of construction is expected to slacken somewhat in later years, but total expenditures in 1973 are projected to be still over 40 per cent higher than they were in 1967.

University officials frequently expressed concern over the increasing per-student cost of physical facilities, and the demands they were obliged to place on provincial funds.

Provincial Governments

Since most of the provincial governments provided information for next year only, the index of capital expenditures is compiled only to 1969. It is included in the table of indexes in the Appendix, and indicates for 1969 a modest increase only, on top of the large increase reported for 1968 over 1967. The substantial variation between the index of total anticipated expenditures and those for construction and equipment separately is due to the influence of data from governments that were not able to provide their figures broken down into construction and equipment, and hence their figures are included in the index of total expenditures only.

With regard to capital expenditures in the government sector in general, it is the hope of the Economic Council that data may be developed at all levels of government -- municipal, provincial and federal -- to complement the medium-term projections now being collected from the private sector. Government officials with whom this subject has been discussed expressed interest in such information for their own planning purposes. It is our view that since both the private and public sectors of the economy call upon many of the same resources, both physical and financial, for the establishment of new capital facilities, information concerning future intentions by both governments and private organizations would be of mutual benefit in laying plans for steady and sustained rates of growth throughout the economy.

CAPITAL INVESTMENT PLANNING

In the opening section of this report, attention was drawn to the fact that the extent of medium-term capital investment planning appears to be increasing. In this year's survey, over 85 per cent of the business firms provided capital investment projections through to 1973, compared with approximately 70 per cent last year and fewer than 60 per cent for the first such Council survey in 1964. These proportions become somewhat more significant when consideration is given to the fact that over 160 business firms were covered this year, whereas only 86 were surveyed in 1964.

Moreover, the characteristic decline in projected levels of capital investment towards the end of the five-year period may be diminishing. In the business capital investment index resulting from this year's survey, the total decline from the peak year, 1970, to the end of the period is considerably less pronounced than for the comparable period in either the 1967 or the 1964 survey. This feature may, of course, be the result also of the substantially larger number of companies covered in the current survey.

In any case, problems appear to remain, in making reasonably accurate assessments of requirements for new capital facilities, even in the fairly near term. At the time of the 1967 survey just over one year ago, the level of capital expenditures projected for 1969 was approximately 6 per cent below that for 1968. Now, however, the outlook for 1969 is for an increase of almost 9 per cent above 1968, a shift, in the course of a little over a year, of almost 15 per cent in the outlook for capital investment in 1969.

This rather wide variation in short-term expectations should not be interpreted necessarily as a reflection on the calibre of planning activities. It may represent, in part at least, response to significant changes in the environment in which the companies operate. It will be recalled

that in 1967 many businessmen were concerned over rising costs, declining demand and lower profits, together with uncertainties associated with the Carter Commission report and the Kennedy Round of tariff negotiations. The result was a projected level of capital expenditures which would be inadequate for the economy to operate at potential output.

At the time of this year's survey on the other hand, a marked upturn had taken place in business activity and in profits, and there had been some clarification of (though not necessarily agreement with) some of the Carter and Kennedy Round proposals.

The fact that changes take place, and will continue to do so at an accelerating rate, emphasizes the need for flexibility in forward plans and should serve also as a stimulus for improved planning, designed on the one hand to exploit opportunities that are presented and on the other hand to cope with the problems associated with change. Consistent with good flexibility in planning, however, there is also a need for avoiding undue and excessive volatility in investment planning (and expenditures) as a result of temporary factors and forces. Forward planning calls for continuing attention to the goals of the organization and provides advance notice of requirements not only for capital facilities but also for manpower, finances and over-all organization.

In terms of capital investment in particular, good forward planning in both the private and public sectors can yield a number of important benefits. On the one hand it should help to avoid excessive levels of capital expenditure beyond likely requirements, and on the other hand ensure adequate levels of investment in productive capacity to take advantage of the demand that would exist in an economy operating at or near potential output. Good planning should also eliminate some of the high costs and stresses associated with the volatile patterns of capital investment in the past.

We mentioned earlier that we hope to include various levels of government in this annual coverage of the medium-term capital investment outlook. With information concerning future expenditure intentions of both governments and private organizations as a base, and the opportunity the survey interviews provide for the discussion of questions and ideas, it is our aim that these surveys will form a vital link in the information system required for effective forward planning and sound decision-making at all levels in the economy.

APPENDIX

Scope of the Survey

Recognizing the need for current information that would be of assistance for business and government decision-making, the Economic Council decided last year to carry out its survey of medium-term capital investment intentions on an annual basis. This year, the survey was extended to cover approximately 160 of the larger Canadian companies, representing over 60 per cent of the total business capital investment in Canada in 1967. The following table shows the survey coverage compared with National Accounts totals. Inclusion of over 160 companies this year compares with 104 in 1967 and 86 in the 1964 survey. Universities and provincial governments were included for the first time, in order to broaden further the base from which investment expectations may be scrutinized.

The coverage is now sufficiently broad to permit a meaningful segregation of the data into 10 industry groups, as well as universities and provincial governments. This segregation lends itself to a more detailed analysis of the business data than was possible in prior reports. Extension of the survey to a substantially larger number of companies provided an opportunity also to obtain the views and expectations of a wider group of business executives.

Survey Coverage Compared with National Accounts Totals

	Non-Residential Construction	Machinery and Equipment	Total
	(Millions of dollars)		
National Accounts			
1967 Total Business Capital Formation as per National Accounts	7,007	5,358	12,365
less Housing	2,337	--	2,337
less Agriculture, Fishing, Forestry	292	870	1,162
less Institutional Services	1,172	199	1,371
equals	3,206	4,289	7,495
Survey			
1967 Capital Formation of Firms Included in Survey	2,146	2,510	(4,656) 4,741*
Percentage Coverage	66.9	58.5	(62.1) 63.3*

* A few firms were unable to allocate spending between machinery and equipment, and construction. These are included in the totals denoted by an asterisk. Those firms that were able to break down their spending are included in the bracketed figures above.

Source: Based on data from Private and Public Investment in Canada, Outlook 1968, Mid-Year Review, Dominion Bureau of Statistics and Department of Trade and Commerce, and estimates by Economic Council of Canada.

The time horizon for this survey was set at 1973. Because projections of capital expenditures have tended to require substantial revision, especially those furthest forward, an attempt was made during the interviews to discover the type of intervening events to which these expenditures are sensitive, and what sort of conditions, economic or other, would cause a revision in the amount and timing of a capital outlay.

Total planned capital expenditures were, as usual, requested to be classified as "construction" or "machinery and equipment", and DBS definitions of these classifications were supplied to each participant. As was noted in the body of this report, some organizations do not make this breakdown of their projected capital expenditures.

No attempt was made in this survey to segregate expenditures on new equipment and construction from repair expenditures of a capital nature. There are some indications that certain types of repair expenditures are of sufficient importance to merit special consideration; it is therefore anticipated that further attention will be directed to this matter in future surveys.

Procedure

In order to extend the coverage of the survey to include a sufficiently large number of companies to permit a more detailed breakdown of the data by industry, the interview stage of the inquiry was carried out in conjunction with the regular annual Preliminary Survey of Capital Investment Intentions conducted by the Department of Trade and Commerce. The data for the latter study, designed to obtain the investment figures for one year forward, were sufficiently like those required for the Council's work to make such a co-operative effort feasible. Several advantages emerged from this co-operation, not the least of which was the reduction of the demands on management time of the responding companies. In addition, it was possible, with a larger team of interviewers, to collect almost all the necessary figures within a four-week period in October. Collection of the data over a much shorter time span minimized a difficulty experienced in prior years where external events, occurring during the rather extended interview schedule, would affect the outlook of planners towards capital investment.

As an initial approach to surveying the investment expectations of the provincial governments, data were requested from them for only one year forward. Hence there is no provincial government data in the current index figures beyond 1969. It is hoped, however, to include, in future surveys, information from all levels of government for the entire period being reviewed.

With only a few exceptions, the survey was conducted by means of personal interview, following an introductory letter outlining the purposes of the study and the information being sought. An effort was made to keep the interviews relatively unstructured, in order to get as accurate an indication as possible of the plans of that particular organization and of the difficulties encountered by organizations in their planning activities. Similar to the procedure followed in earlier surveys, and in order to maximize the coverage of this one, companies were requested to include, where appropriate, the capital expenditure intentions of subsidiaries.

The nature of the long-range planning process is such that it is usually undertaken by executives in the higher echelons of the company. For this reason, an attempt was made, and was generally successful, to secure the interview with the chief executive officer of the organization, or one of his colleagues who was aware of the more extended plans of the organization. In the one- and sometimes two-hour discussions these people granted, interviewers gained a wealth of information on the decision-making processes relating to capital expenditures.

Summary Indexes of Capital Investment Intentions

(1967 = 100)

	1967	1968	1969	1970	1971	1972	1973	1967	1968
				Construction					
Manufacturing (Total)	100.0	64.4	96.1	101.6	73.5	69.7	56.1	100.0	76.0
Pulp & paper	100.0	54.7	59.4	38.7	41.3	52.3	41.1	100.0	54.9
Primary metals	100.0	45.6	121.6	160.5	77.7	73.0	45.0	100.0	66.5
Chemicals	100.0	114.9	116.6	156.8	152.3	104.3	94.5	100.0	97.9
Other manufacturing	100.0	84.1	131.5	141.0	107.3	89.6	84.0	100.0	90.4
Mining	100.0	123.9	128.0	135.9	136.4	62.1	88.6	100.0	104.9
Oil & Gas Companies[1]	100.0	126.7	139.2	137.7	130.1	120.3	121.0	100.0	133.7
Oil & Gas Transmission[2]	100.0	119.0	122.1	124.1	112.3	105.2	136.1	100.0	118.3
Power Utilities	100.0	100.8	115.2	107.7	102.6	82.0	77.0	100.0	106.8
Transportation & Storage	100.0	100.0	142.8	174.1	145.2	130.4	131.4	100.0	115.3
Communications	100.0	101.2	119.2	136.7	122.1	139.1	144.5	100.0	104.8
Trade, Finance & Other Commercial[3]	100.0	129.3	150.5	170.5	128.6	127.1	147.8	100.0	118.3
Total Business	100.0	103.7	120.9	122.7	109.8	95.5	95.3	100.0	100.0
Universities	100.0	124.4	149.5	193.8	173.6	154.7	144.5	100.0	111.4
Provincial Governments	100.0	80.4	82.8	--	--	--	--	100.0	77.1
Survey Total	100.0	103.0	119.5	124.2	111.2	97.0	96.1	100.0	100.0
Organizations Included[4]	163	176	176	163	154	151	142	160	173

(1) Includes production and refining.

(2) Includes pipelines and distribution.

(3) Includes banks.

(4) Because the number of organizations providing estimates is not constant throughout the period, the index numbers have been built up from overlapping year-to-year comparisons rather than from simple totals. The figures for any given year cover the same firms as in the immediately preceding year. Thus, although the coverage of the index is narrower in certain years, there is no distortion arising from lack of figures for some organizations.

Summary Indexes of Capital Investment Intentions (cont'd.)

1969	1970	1971	1972	1973	1967	1968	1969	1970	1971	1972	1973
Machinery and Equipment					Total						
90.3	96.3	87.0	88.0	88.3	100.0	75.8	90.4	88.1	79.0	78.4	75.5
75.9	54.7	61.5	76.1	62.2	100.0	54.9	69.2	48.9	53.7	66.5	54.0
90.2	109.4	80.6	88.1	105.6	100.0	74.3	96.7	81.8	76.7	79.3	82.0
90.6	106.9	110.1	77.5	87.3	100.0	99.9	94.1	113.4	97.5	70.7	76.4
102.5	118.7	102.8	100.2	100.3	100.0	89.2	105.8	119.6	98.3	92.6	91.8
104.6	78.0	166.3	94.3	73.9	100.0	110.7	112.7	103.0	148.1	76.9	78.8
136.9	165.0	173.7	148.0	104.8	100.0	131.5	140.3	151.8	151.3	134.5	115.9
94.8	85.0	83.4	70.8	61.7	100.0	118.8	112.0	109.8	101.7	92.6	104.5
123.4	127.0	138.9	137.4	130.0	100.0	106.3	117.5	113.0	112.3	96.7	91.1
102.7	109.7	107.4	114.7	109.7	100.0	110.2	115.9	127.8	117.3	117.5	114.6
108.5	122.6	136.5	138.7	149.9	100.0	104.3	109.6	123.3	132.1	136.5	146.5
121.8	118.8	121.2	109.4	109.7	100.0	124.9	139.1	150.1	122.8	117.4	129.5
105.6	113.3	117.7	113.5	108.5	100.0	103.1	112.2	114.8	112.2	103.4	100.6
123.7	136.4	240.7	209.6	151.1	100.0	113.8	142.5	181.5	178.2	158.1	142.0
90.4	--	--	--	--	100.0	151.2	158.5	--	--	--	--
105.7	113.5	118.9	114.4	108.9	100.0	104.2	113.4	117.4	114.7	105.5	102.2
174	165	163	161	153	175	190	193	178	176	174	164

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by

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